hoary with numerous fine calices; postocellar area convex, calices larger; antennal, vertical, and ocellar furrows obsolete; prominent polished area between each later ocellus and a compound eye; mesonotum including mesoscutellum punctulate; mesopleuræ with dorsal half finely closely punctured; wings hyaline, costa and stigma and veins black; saw-guides with dorsal margin straight, ventral margin convex, distal end rounded. Length 7 mm.

Habitat: Ithaca, New York. No. 59–4–1.

This species is similar to flaccida but the difference in the topography of the head will separate them.

ON SOME SPECIES OF THE GENUS NIPPONAPHIS PERGANDE (APHIDIDÆ, HEMIPTERA).

By Ryoichi Takahashi, Taihoku, Formosa.

Genus Nipponaphis Pergande 1906. Syn. Schizoneuraphis Van der Goot 1917.

Up to the present time this remarkable genus has been recorded only from Japan and Java. From the former country four species are now known—N. cuspidatæ Essig et Kuw., N. distylii Perg., N. yanonis Mats., and N. distyfoliæ n. sp.

N. cuspidatæ Essig and Kuwana.

The species is very common on the young shoots of Quercus dentata and Q. cuspidata.

All the other Japanese species of the genus are found on the leaves of their food plants, have alternate hosts and make very prominent galls. N. cuspidatæ, however, does not have two hosts but spends the whole life cycle on the Quercus, without producing galls at all. The winged forms appear only in the spring and no sexes occur through the year in Tokio.

N. distyfoliæ n. sp.

This aphis produces very prominent galls on the leaves of the winter host, Distylium racemosum.

The galls start about April, attaining their full growth and development toward the end of May. The stem-mother is wingless, but the females of the second generation always have wings and migrate to Quercus glandulifera, or closely related species, in June.

The females of the third and some of the succeeding generations on the summer hosts are wingless and stationary as in Aleurodes, being firmly cemented to the leaf.

The winged sexuparæ appear in October and November and return to the winter host to produce sexual forms.

The oviparous female, as well as the male, has no wings, but possesses a well developed rostrum, as is characteristic of the Hormaphidina, to which Nipponaphis belongs.

Description.

Migrant (Second Generation).

Color: Head, eyes, antennæ, legs and mesothorax black. Abdomen brownish yellow. Wings pale dusky, veins pale brown.

Morphology: Body oblong, broadest at the middle of the abdomen; without hairs. Head very short, without frontal tubercles; eyes very large; antennæ short, not slender, the two nasal joints, as usual, shortest and nearly subequal in length, the remaining three joints cylindrical and of almost equal thickness, the third longest, nearly equal in length to the fourth and fifth combined, and divided by eight or nine annulations; fourth and fifth segments nearly equal in length, each provided with from three to five annulations. Rostrum not reaching the middle coxæ. Fore wings not narrow; stigma large; the first discoidal thicker than the remaining veins; first and second discoidals arise quite near one another, the third with one fork, obsolete at the base; stigmal vein terminating at the apex of the wing. Hooklets on the hind wing two in number. Abdomen with some very small tubercles on either side; cornicles represented by pores only; anal plate bilobed; cauda very short and not prominent.

Legs slender, with some fine short hairs and also with four

long capitate hairs.

Length of body—1.4 mm. Length of antenna—0.35 mm. Length of fore wing—1.8 mm. Width of fore wing—0.7 mm.